

Low Impact Development Principles Project



CHAPTER D6 – ON-SITE STORMWATER MANAGEMENT D6-01 GENERAL

On-site stormwater management BMPs infiltrate, disperse, and retain stormwater on-site in order to reduce the volume, peak flow rates, and amount of pollutants in stormwater runoff leaving a developed project site. The following on-site stormwater management BMPs are required where site conditions allow without causing erosion or flooding: Roof Downspout Control BMPs functionally equivalent to those described in Chapter 3 of Volume III of the DOE Manual; and Dispersion and Soil Quality BMPs functionally equivalent to those in Chapter 5 of Volume V of the DOE Manual. Natural Drainage Practices (NDPs) are included here as a sub-set of on-site stormwater management BMPs, and include bioretention, pervious pavement, rain recycling, and vegetated roofs. These NDPs are required unless infeasible and should be an integral part of site designs. These NDPs are encouraged as an integral part of site designs. New BMPs that DOE has approved for General Use (GULD) under DOE's emerging technology program, per Chapter 12, Volume V of the DOE Manual, are allowed. Using NDPs in addition to or in place of the required on-site BMPs (where NDP substitution is allowed) can significantly enhance the overall hydrologic performance of the developed site and further reduce downstream flooding, erosion, water quality impacts, and long-term maintenance requirements. NDPs can also enhance site sustainability and aesthetics, and may add points under LEED and Built Green certification programs. This chapter provides detailed guidance on how to use the criteria set forth in Section 24.06.065(G) of the Storm and Surface Water Utility Code and design guidelines in the LID Technical Guidance Manual and Chapter 3 of Volume III and Chapter 5 of Volume V of the DOE Manual, as modified herein, to plan, design and construct on-site stormwater management BMPs and NDPs. The remainder of this section describes how to apply on-site stormwater management BMPs to meet Minimum Requirement 5 (On-Site Stormwater Management), MR6 (Runoff Treatment), and MR7 (Flow Control).